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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/016,845

12/14/2001

David Kloper

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7445

7590

11/29/2005

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Patent Docket Administration  
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EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. ✓

10/016,845

Applicant(s)

KLOPER, DAVID

Examiner

Shick C. Horn

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 14-19, 21-26, 28-33, 35-40 and 42 is/are rejected.
- 7) ☐ Claim(s) 6, 13, 20, 27, 34, 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-4, 8, 11, 15, 17-18, 22, 25, 29, 32, 36, and 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Prismantas et al. (2002/0155811).

Regarding claims 1, 8, 15, 22, 29, 36:

Prismantas et al. disclose a method for ranging in a radio frequency communications system, the method comprising:

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selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme; transmitting a ranging message according to the selected transmission channel class over a channel (see paragraph 0026 which recite the media access control MAC layer selecting the channel frequency, modulation, code and rate to be used clearly anticipate the step of selecting transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme and the step of transmitting a ranging message according to the transmission channel class); and selectively modifying the transmission channel class based upon characteristics of the channel (see paragraph 0018 which recite using one or more modulations scheme, i.e. 64 QAM, 16 QAM, QPSK or BPSK, for transmission which can change dynamically based upon many factors and paragraph 0020 which recite the step of interference detection to determine the signal strength clearly anticipate the step of selectively modifying the transmission channel class based upon the characteristics of the channel and the use of a ranging message).

Regarding claims 3, 4, 11, 17-18, 25, 32, 38-39:

Prismantas et al. disclose wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class and wherein the modifying step is

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performed periodically in response to a change in the characteristics of the channel (see paragraph 0024 which recite the determining and using the timing and reoccurring period or repetitiveness of the interference to interference mitigation clearly reads on the iterative and periodical step to achieve an improved transmission class and in response to a change in the characteristics of the channel).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5, 10, 12, 19, 24, 26, 31, 33, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prismantas et al. (2002/0155811) in view of Enns et al. (2003/0161263).

For claims 5, 10, 12, 19, 24, 26, 31, 33, and 40, Prismantas et al. disclose the system and method described in paragraph 3 of this office action. Prismantas et al. disclose

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all the subject matter of the claimed invention with the exception of wherein the transmission rate is increased to a value that is sustainable by the channel as in claims 10, 24, 31, and wherein the radio frequency communications system includes a satellite configured to support two-way communication as in claims 5, 12, 19, 26, 33, 40.

Enns et al. from the same or similar fields of endeavor teach that it is known to provide wherein the transmission rate is increased to a value that is sustainable by the channel (see paragraph 0018 which recite accelerating the sessions to a maximum rate for each transmission) as in claims 10, 24, 31; and wherein the radio frequency communications system includes a satellite configured to support two-way communication (in Fig. 1 see the two-way communication to the satellite) as in claims 5, 12, 19, 26, 33, 40. Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein the transmission rate is increased to a value that is sustainable by the channel and wherein the radio frequency communications system includes a satellite configured to support two-way communication as taught by Enns et al. in the communications method and apparatus of Prismantas et al. The transmission rate being increased to a value that is sustainable by the channel and wherein the radio

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frequency communications system includes a satellite configured to support two-way communication can be implemented by connecting the processor for accelerating the session and the two-way communication link to the satellite of Enns et al. into the transmission circuit and system, respectively, of Prismantas et al. The motivation for using the processor for accelerating the session and wherein the radio frequency communications system includes a satellite configured to support two-way communication as taught by Enns et al. in the communication method and apparatus of Prismantas et al. being that it provides more efficiency for the system since the system can accelerate the transmission rate of selected communication sessions using the processor and the added feature of two-way communication to the satellite.

6. Claims 2, 7, 9, 14, 16, 21, 23, 28, 30, 35, 37, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prismantas et al. (2002/0155811) in view of Parmenter (6,615,052).

For claims 2, 7, 9, 14, 16, 21, 23, 28, 30, 35, 37, 42, Prismantas et al. disclose the system and method described in paragraph 3 of this office action. Prismantas et al. disclose

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all the subject matter of the claimed invention with the exception of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing.

Parmenter from the same or similar fields of endeavor teach that it is known to provide the step of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing (see abstract which recite the used of pre-stored power parameters for the active transmission channel to adjust the output power and col. 5 lines 44-65 which recite adjusting the loading to achieve a predetermined minimum BER). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the step of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing as



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taught by Parmenter in the communications method and apparatus of Prismantas et al. The step of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing can be implemented by connecting the means for power control including the pre-stored power parameters and predetermined minimum BER of Parmenter into the transmitter of Prismantas et al. The motivation for providing means for power control and load balancing as taught by Parmenter in the communication method and apparatus of Prismantas et al. being that it provides more efficiency for the system since the system can control the transmission power to achieve predetermined minimum error rate at the receiving end.

***Allowable Subject Matter***

7. Claims 6, 13, 20, 27, 34, and 41 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Danckwerth et al. disclose a semiconductor laser pulse compression radar system.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

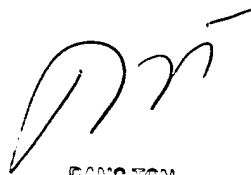
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



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SUPERVISOR